

20010503.qrp v02_n178.qrl.20010503

Date: Thu, 3 May 2001 19:03:07 EDT

From: qrp-l@Lehigh.EDU

To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>

Subject: QRP-L digest 2178

QRP-L Digest 2178

Topics covered in this issue include:

- 1) [97531] Re: QRP Speakers
by Henry Freedenberg <henryf@quartz.gly.fsu.edu>
- 2) [97532] Re: [MH101] DDS VFO instead of a crystal
by "Craig Johnson" <cbjohns@mn.mediaone.net>
- 3) [97533] Re: [MH101] DDS VFO instead of a crystal
by Mark Dulcey <mark@buttery.org>
- 4) [97534] V22 additional info
by Michael Goins <mgoins@usa.net>
- 5) [97535] another SMK Question
by "Delbert Long" <ad6we@hotmail.com>
- 6) [97536] Cheap PSK-31 compatible computer source
by "Joe Everhart" <n2cx@voicenet.com>
- 7) [97537] Testing Post
by "Floyd Smithberg" <nq7x@earthlink.net>
- 8) [97538] QRP ATV Circuit Schematic Help Needed
by Jeff <jeffj@notachance.com>
- 9) [97539] Re: QRP ATV Circuit Schematic Help Needed
by KB7WW Art Moe <kb7ww@uswest.net>
- 10) [97540] RE: DDS VFO instead of a crystal
by "Mike Mullins" <mmullins@mastnet.net>
- 11) [97541] Re: QRP ATV Circuit Schematic Help Needed
by Jeff <jeffj@notachance.com>
- 12) [97542] Re: [OT] Mysteries of 30-meters
by Doug <doug@ycsi.net>
- 13) [97543] FS: Yaesu case for FT-817
by "NZ8J" <timcook@erinet.com>
- 14) [97544] RE: [MH101] DDS VFO instead of a crystal
by Nick Kennedy <nkennedy@tcainternet.com>
- 15) [97545] test no need to read
by JOHN FISHER <ve7fdg@mad.scientist.com>
- 16) [97546] Re: [OT] Mysteries of 30-Meters
by George Gingell <k3tks@u1.abs.net>
- 17) [97547] QRPTTF From The Great White North.
by "Niels" <nkristja@cadvision.com> (by way of Niels Jensen Kristjansson <nkristja@cadvision.com>)
- 18) [97548] Re: Epiphyte 3 kit, MS-15 kit
by "Jerry McCollom" <w0mc@hotmail.com>

- 19) [97549] Thank Guys
by RangerSF5@aol.com
- 20) [97550] Re: New Kind of Batter coming soon
by "Mike Yetsko" <myetsko@insydesw.com>
- 21) [97551] RE: [MH101] DDS VFO instead of a crystal
by "Robert P. Okas" <vintage@best.com>
- 22) [97552] hosstraders
by "Terres Family" <terresfm@ncia.net>
- 23) [97553] NEQRP CW Net, Thursday, 3 May, 9:00 PM EDT, 3.561MHz
by Chuck Ludinsky <cjl@mitre.org>
- 24) [97554] RE: New Kind of Battery coming soon
by wb2vuo@juno.com
- 25) [97555] FW: [FISTS] for sale
by "Ed Tanton" <n4xy@att.net>
- 26) [97556] FW: Seven Billion Miles and Counting TALK ABOUT MILES-PER-WATT!!!
by "Ed Tanton" <n4xy@att.net>
- 27) [97557] OT: Rcvrs for Evesdropping (was 30M Mysteries)
by Kenneth Hoglund <hoglund@wfu.edu>
- 28) [97558] Cost/Benefit Analysis of Iambic Paddle
by "Rick Austin" <rick@ltcable.com>
- 29) [97559] Re: Cost/Benefit Analysis of Iambic Paddle
by Bruce Muscolino <w6toy@erols.com>
- 30) [97560] Re: [OT] Mysteries of 30-Meters (LONG!)
by William R Colbert <w5xe@juno.com>
- 31) [97561] Re: Cost/Benefit Analysis of Iambic Paddle
by "Mark J. Dulcey" <mark@buttery.org>
- 32) [97562] Re: OT: Rcvrs for Evesdropping (was 30M Mysteries)
by Rick Robinson <rerobins@email.uncc.edu>
- 33) [97563] [MH101] DDS VFO instead of a crystal
by Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
- 34) [97564] Re: [OT] Mysteries of 30-Meters (LONG!)
by "Karl F. Larsen" <k5di@zianet.com>
- 35) [97565] Re: [OT] Mysteries of 30-Meters (LONG!)
by William R Colbert <w5xe@juno.com>
- 36) [97566] RE: Cost/Benefit Analysis of Iambic Paddle
by "Roger A. McCarty" <rmccarty@earthlink.net>
- 37) [97567] Re: Cost/Benefit Analysis of Iambic Paddle
by "Rick Austin" <rick@ltcable.com>
- 38) [97568] Fwd: Re: [RMG] FDIM Ride Available from Houston
by "Ed Manuel (N5EM)" <n5em@flash.net>
- 39) [97569] the 2\$ gallon!
by Euramcom <mel@euramcom.freemove.co.uk>
- 40) [97570] Battery cable - a query
by "John Nally" <nally@talstar.com>
- 41) [97571] RE: Battery cable - a query
by "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
- 42) [97572] Re: Battery cable - a query
by "Mike Yetsko" <myetsko@insydesw.com>

- 43) [97573] Re: Battery cable - a query
by "Mike WA8BXN" <hubby2k@hotmail.com>
- 44) [97574] Re: [OT] Mysteries of 30-meters
by Garie Halstead <k8kfj@ntelos.net>
- 45) [97575] Re: OT: Rcvrs for Evesdropping (was 30M Mysteries)
by William R Colbert <w5xe@juno.com>
- 46) [97576] Re: [OT] Mysteries of 30-Meters (LONG!)
by "Oleg Borodin" <vector72@lipetsk.ru>
- 47) [97577] Re: [OT] Mysteries of 30-Meters (LONG!)
by "Oleg Borodin" <vector72@lipetsk.ru>
- 48) [97578] Pixie2 on 20m
by "Oleg Borodin" <vector72@lipetsk.ru>
- 49) [97579] Re: the 2\$ gallon!
by Bob Nielsen <nielsen@oz.net>
- 50) [97580] Re: the 2\$ gallon!
by "Ted Williams" <ted@g0ull.fsnet.co.uk>
- 51) [97581] Re: [OT] Mysteries of 30-meters
by Richard Rood <fcs@juno.com>
- 52) [97582] Re: the \$2 gallon
by Harris Keith E CONT CNIN <harris_k@crane.navy.mil>
- 53) [97583] [CONTEST] QRP Contest Calendar - May 2001
by Ken Newman <N2CQ@citnet.com>
- 54) [97584] RE: Battery cable - a query
by N1EU <n1eu@yahoo.com>
- 55) [97585] [OT] Mysteries of 30-meters - Receivers
by "Bob Follett" <bfollett@msn.com>
- 56) [97586] Re: Battery cable - a query
by Rick Robinson <rerobins@email.uncc.edu>
- 57) [97587] RE: Battery cable - a query
by Jim Cotton <jim.cotton@wmich.edu>
- 58) [97588] RE: Battery cable - a query
by Euramcom <mel@euramcom.freemove.co.uk>
- 59) [97589] Fw: Re: Cost/Benefit Analysis of Iambic Paddle
by "Rick Austin" <rick@ltcable.com>
- 60) [97590] Re: Fw: Re: Cost/Benefit Analysis of Iambic Paddle
by "Karl F. Larsen" <k5di@zianet.com>
- 61) [97591] Re: the 2\$ gallon!
by "Brian Murrey" <bmmurrey@amexol.net>
- 62) [97592] Re: the 2\$ gallon!
by "Phil (VA3UX)" <phil@vaxxine.com>
- 63) [97593] Re: Battery cable - a query
by preacher102677@juno.com
- 64) [97594] RE: the 2\$ gallon!
by <schoon@amgt.com>
- 65) [97595] OT - Re: the 2\$ gallon!
by "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
- 66) [97596] Re: OT - Re: the 2\$ gallon!
by "Carlos Caro" <cjcaro35@hotmail.com>

67) [97597] Re: Battery cable - a query
by "Don Wilhelm" <w3fpr@arrl.net>

Date: Wed, 02 May 2001 19:19:01 -0400
From: Henry Freedenberg <henryf@quartz.gly.fsu.edu>
To: wlauner@mail.win.org, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97531] Re: QRP Speakers
Message-ID: <4.3.1.2.20010502191758.00a966a0@gly.fsu.edu>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

I use similar speakers with my MFJ. They are quite serviceable. My speakers have a built in amp in one of the speakers that is quite handy for amplifying the MFJ audio output.

At 10:01 AM 5/2/01 -0500, William H. Launer wrote:
>Office Max has a pair of nice, un-amplified computer speakers for \$9.99,
>with a \$9.00 Mail-in rebate. They come connected to a stereo plug, but
>it's easy to clip one lead and install a connector on the second speaker.
>Certainly a good "qrp" price!
>
>Bill wb0cld
>
>Bill Launer wb0cld
>St. Charles, MO
>
>
>

Date: Wed, 2 May 2001 18:43:21 -0500
From: "Craig Johnson" <cbjohns@mn.mediaone.net>
To: <qrp-1@Lehigh.EDU>
Subject: [97532] Re: [MH101] DDS VFO instead of a crystal
Message-ID: <003001c0d361\$abe05c70\$6501a8c0@CBJP2>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Steve, KD1JV said:
>And if you have deep pockets, there's the AD9854, a dual 300 MBS DDS
>with quadrature outputs. In theory, one could use this chip with a

>R2/T2 set up and cover 0 to 150 MHz. Trick is switching all the
>input and output filters it would need.

>The down side is the 9854 runs some \$70 in small quantities, comes in
>an 80 pin smt package with 26 mil pin spacing and consumes some
>3.3 watts of power-- 1A at 3.3V!

I am working on this design also. My friend, Bruce (AA0ED) and I are running a test board with a AD9854, driven by two PIC microcontrollers (We have a 16F877 for the AD9854, LCD, etc, and a separate 16F84 to handle the rotary encoder.) We are planning to feed the quadrature output to an R2/T2 combo. Anxiously waiting for the R2Pro to appear. When my AD9854 is initialized I measure only about 350 ma current draw. (Running at 3.3v.) It does draw about 1A when it is first powered up. I think the AD9854 is still available directly from Analog for about \$26.00 in small quantities. 73,-
Craig, AA0ZZ

Date: Wed, 02 May 2001 20:23:05 -0400
From: Mark Dulcey <mark@buttery.org>
To: cbjohns@mn.mediaone.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97533] Re: [MH101] DDS VFO instead of a crystal
Message-ID: <3AF0A4E9.6B86C2AF@buttery.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Craig Johnson wrote:

>
> I think the AD9854 is still
> available directly from Analog for about \$26.00 in small quantities. 73,-

And if you register at their site and request samples, they even send them! Alas, they don't currently have AD9854 or AD9851 samples available, but you can get samples of the AD9852 (the same device as the 9854, but with only one DAC, so it doesn't do the quadrature thing) and the AD9850. The documentation for the chips is available in PDF form on their web site, www.analog.com; you can also order chips there, and they seem to be cheaper (at least in small quantities) than they are through distributors.

--

Mark J. Dulcey mark@buttery.org
Visit my house's home page: <http://www.buttery.org/>
Visit my home page: <http://www.buttery.org/mark/>

Date: 2 May 2001 19:38:03 EST
From: Michael Goins <mgoins@usa.net>
To: qrp-1@lehigh.edu
Subject: [97534] V22 additional info
Message-ID: <20010503003803.7145.qmail@aw162.netaddress.usa.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

I think its sold. If not, I'll repost the older ham's contact information=
=2E
thanks.
mike

Get free email and a permanent address at <http://www.amexmail.com/?A=3D1>

Date: Thu, 03 May 2001 01:02:09 -0000
From: "Delbert Long" <ad6we@hotmail.com>
To: qrp-1@Lehigh.EDU
Subject: [97535] another SMK Question
Message-ID: <F103Mb1s7n1T2NqFJ3s000129c6@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Forgot to ask...I'm not experienced at operating with a direct conversion receiver. I am able to tune the RX through both sidebands of a received signal, but not always able to tune my signal that far. (I hope that makes sense). Anyhow I do realize that I have to be transmitting in the right place or the station I am trying to answer might not hear me. So the question is how do I place my signal in the right spot? Thanks again and again....

Delbert Long, AD6WE
2111 Cheyenne Way Unit 9
Fullerton, CA 92833-4912
Grid Square DM13

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Wed, 2 May 2001 21:56:54 -0400
From: "Joe Everhart" <n2cx@voicenet.com>
To: "njqrp" <njqrp@njqrp.org>
Cc: "qrpl" <qrpl-1@lehigh.edu>
Subject: [97536] Cheap PSK-31 compatible computer source
Message-ID: <000b01c0d374\$6a4d6ce0\$9d5847d1@n2cxtoy>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,

I've found source for cheap PC's that will run PSK-31.

Jerry, W2GIA, the guy who sold a bunch of Poqet computers last year now has a quantity of Pentium 100's that will run Digipan 1.5. I tried one with my Warbler the other evening and made a QSO 10 minutes after loading Digipan!

The machines have a soundcard, a single floppy drive, 16 Meg of RAM, 1 serial port, 1 parallel port and at least 1 Meg of SVGA memory. They come in a desktop case and have a minimal Windoze 95 loaded on a 1.2G hard disk.

You have to supply your own monitor, keyboard and mouse.

Best of all they are only \$50 plus shipping from NJ.

You can contact Jerry at dndcom@earthlink.net

As always I have no financial interest, etc. etc. just a desire to share good deals.

72/73,
Joe E., N2CX

Date: Wed, 2 May 2001 19:17:19 -0700
From: "Floyd Smithberg" <nq7x@earthlink.net>

To: "QRP-L Message" <qrp-l@Lehigh.edu>
Subject: [97537] Testing Post
Message-ID: <002b01c0d377\$2f9c1120\$f37d1d26@floyd>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Just moved from ATT to Earthlink, check to see if this post appears.
73 Floyd NQ7X Phoenix,AZ ScQRPion DM33uq

Date: Wed, 2 May 2001 21:46:03 -0500 (CDT)
From: Jeff <jeffj@notachance.com>
To: <qrp-l@lehigh.edu>
Subject: [97538] QRP ATV Circuit Schematic Help Needed
Message-ID: <Pine.OSF.4.33.0105022142430.3555-100000@fly.HiWAAY.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hiya! Can anyone on the list point me to where I might can find a schematic for a ATV transmitter that operates in the 432MHz range? I know that I can buy commercial units and that there are many folks selling such units for 'spy cameras' (which really gripes me since they operate in 'our' spectrum but I would like to try to build my on micro transmitter. If anyone knows of a schematic or can help me create one, I would be extremely grateful!

73 de Jeff W4JEF

-- Reserve Deputy Chief Jeff Johns - W4JEF --
-- Jefferson County Sheriff's Department --
-- B'ham, AL USA jeffj@notachance.com --

Date: Wed, 02 May 2001 20:03:46 -0700
From: KB7WW Art Moe <kb7ww@uswest.net>
To: jeffj@notachance.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [97539] Re: QRP ATV Circuit Schematic Help Needed
Message-ID: <3AF0CA92.47129C5F@uswest.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Jeff

QST November 1996.

Art

KB7WW

Jeff wrote:

```
>
> Hiya! Can anyone on the list point me to where I might can find a
> schematic for a ATV transmitter that operates in the 432MHz range? I know
> that I can buy commercial units and that there are many folks selling such
> units for 'spy cameras' (which really gripes me since they operate in
> 'our' spectrum but I would like to try to build my on micro transmitter.
> If anyone knows of a schematic or can help me create one, I would be
> extremely grateful!
>
> 73 de Jeff W4JEF
>
>          -- Reserve Deputy Chief Jeff Johns - W4JEF  --
>          -- Jefferson County Sheriff's Department  --
>          -- B'ham, AL USA  jeffj@notachance.com  --
```

Date: Wed, 2 May 2001 20:47:00 -0500
From: "Mike Mullins" <mmullins@mastnet.net>
To: "QRP-L post message" <qrp-l@lehigh.edu>
Cc: "Paul Kiciak" <pkiciak@att.net>, <adamvaz@palm.net>
Subject: [97540] RE: DDS VFO instead of a crystal
Message-ID: <002a01c0d37e\$627be280\$40468bd8@downstairs>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

'Adam Kb2Jpd' wrote:

```
> Maybe someone could design something along those lines: a fully
> adjustable DDS VFO with outboard computer control. The neat thing about
> using DDS is you could do practically any type of modulation.
```

Leon, Steve (melt solder), and Laura had some excellent responses to this post which I agree with. Also, check out the latest (May) edition of 'Circuit Cellar Ink' in which a very nice generator based on a AD9852 is described. Nice specs, but it looks like a massive undertaking. The AD9852 has all of the bells and whistles which would make various modulation

schemes easy. But, read Steve's post.

Right now I'm working on a based on an AD9850 driven by a PIC 16F872. It's a modified version of the design published by Preuss WB2V in QEX. Far Circuits sells a board for the original circuit which uses a 16F84. The 16F872 has enough pins to be able to drive the DDS with a parallel interface, which is much faster. The DDS chips are available directly from the Analog Devices website. I solved the PCB problem (the 10 mm SOIC 28 pin part needs very narrow lines) by going to a commercial service called ExpressPCB. They have some excellent free software for board design. For \$59 you can get 3 small boards (2.5 by 3.8) two-sided with plated holes (no solder mask or silk screen). You send them your design over the net (along with your credit card number) and they mail the boards in less than 1 week. I managed to fit 2 copies of my design on each board, so each board was about \$10. This prototype board has some problems (I didn't know the numbering of the xtal oscillators was a bottom view, for instance) but I've got it to work with a nice big, backlit LCD. Just to test it, I replaced the 16 MHz VFO in Steve's MS-15 transceiver, and made several QSO's with it. Yes, it has some spurs, but it's nice to have a perfectly stable VFO. Also, you can tune down to 20 MHz and listen to WWV (although it sounds strange through the narrow IF filters). I'd like to have the DDS automatically shift frequency on keying, and eliminate the xmit mixer in Steve's design. And, XIT and RIT. And,..... Eventually I'd like to design a 10 meter rig, although at the rate I'm going it might not be done until the peak of the next solar cycle.

Currently I'm working on the software for serial communications to another PIC using I2C protocol. This is a 2-line bus which allows multiple masters and has collision arbitration. I've done this before, but I have a bug which is driving me insane. I really need a digital scope. I saw one in Fry's the other day, but it was priced above my \$40 budget by about 2 orders of magnitude.

Incidentally, the last time this topic came up, I heard from Paul N2PK. He built a VFO with two 9850's in quadrature using dead-bug construction!!! I wish he would post more - he really knows what he's doing. We had a long series of e-mails during which he taught me a lot about receiver design.

73 de Mike KD5CMN

Date: Wed, 2 May 2001 22:12:42 -0500 (CDT)
From: Jeff <jeffj@notachance.com>
To: <qrp-l@lehigh.edu>
Subject: [97541] Re: QRP ATV Circuit Schematic Help Needed
Message-ID: <Pine.OSF.4.33.0105022211290.19099-100000@fly.HiWAAY.net>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

On Wed, 2 May 2001, KB7WW Art Moe wrote:

> Jeff
>
> QST November 1996.
>
> Art
> KB7WW

Thanks Art! If anyone has a copy that they could fax me, I would gladly pay for the long distance phone call via PayPal.

Jeff

-- Reserve Deputy Chief Jeff Johns - W4JEF --
-- Jefferson County Sheriff's Department --
-- B'ham, AL USA jeffj@notachance.com --

Date: Wed, 02 May 2001 21:14:41 -0600
From: Doug <doug@ycsi.net>
To: marsgal42@hotmail.com
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [97542] Re: [OT] Mysteries of 30-meters
Message-ID: <3AF0CD21.17A54FB3@ycsi.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Keep in mind that once a signal is cast into the "Eather", it's open to interception. One could be asking for trouble should they attempt to profit measurably from it as opposed to simply a discusstion of happenings on 30 meters. Fret not, there are far larger things to concern ourselves with "out there".

Whether or not the encryption method is solveable, the sender is blessed with responsibility to make sure it is sufficiently difficult to decrypt, based on it's importance both in operational weight and time. If he or she encrypts properly, by the time the message could be worked out, the information is no longer of value. Hence, the beauty of the "one time pad" In today's modern world of communications, it can be assumed

that at some juncture, most all of HF communications is monitored by someone, somewhere with a bone to pick or just morbid curiosity.

The magic is in the medium.

73

Doug, K7YD, ex intercept op

laura halliday wrote:

> The fact that one-time pads are unbreakable is proven
> in, for example, the cryptography chapter in Haykin.
> Since there is zero mutual information between the
> plain- and cyphertext, no decrypting procedure can
> do better than random chance.
>
> Operational issues can compromise any cryptographic
> system - anything from stealing a pad to standing a
> spy up against a brick wall and offering a blindfold,
> or a change of employers...but that's another matter.
>
> Laura Halliday VE7LDH "Que les nuages soient notre
> Grid: CN89mg pied a terre..."
> ICBM: 49 15.042 N 122 59.053 W - Hospital/Shafte
>
>
> -----
> Get Your Private, Free E-mail from MSN Hotmail at <http://www.hotmail.com>.

Date: Wed, 2 May 2001 23:32:28 -0400
From: "NZ8J" <timcook@erinet.com>
To: <qrp-1@Lehigh.EDU>
Subject: [97543] FS: Yaesu case for FT-817
Message-ID: <00f601c0d381\$aefc8300\$6122fea9@nec>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Brand new, never used \$20
please email if interested..
Thanks

Tim
NZ8J

Date: Wed, 2 May 2001 22:37:23 -0500
From: Nick Kennedy <nkennedy@tcainternet.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97544] RE: [MH101] DDS VFO instead of a crystal
Message-ID: <01C0D358.759A4080.nkennedy@tcainternet.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

> >Maybe someone could design something along those lines:a fully
> >adjustable DDS VFO with outboard computer control.

I made one of those DDS things a long time ago. It may have been from the first DDS article to ever appear in QST, back in April 1984. Once I sort of figured out how the thing worked, it was so cool I just had to build one. Not doubt it was the stone axe of DDS technology compared to what's out there today. A separate PROM stored the sine wave data. There were shift registers to bring in the frequency data, bit-banging style (no UART), and three 8-bit latches to store it. I added three more latches so I could store separate transmit and receive data and an extra control line to do the T/R frequency toggle..

The thing could only go to 7.5 Mhz, in accordance with Mr. Nyquist's dictates. Mine was set up to do 5.0 to 5.5 MHz and act as a second VFO for my Ten-Tec Corsair 1. I built the whole mess on a huge perf-board using wire-wrapped connections. (Another first for me.)

The next interesting thing was the software. I'd messed around with assembly language programming for a while and fancied myself an expert. So I wrote a pound or so of 8086 code to control this thing from the PC in DOS. It worked great. I added all the bells and whistles available on the current Kenwood/Icom/Yaesu rigs--RIT, XIT, memories, memory scan, band scan, variable steps, and so on. Slick.

But using the Up and Down arrow keys to change frequency is not acceptable to someone who grew up on boatanchors with their big tuning knobs. So I had to figure out a way to encode the turning of a wheel. Having a toothed wheel break a light beam is pretty obvious, but the circuit to decide which direction the knob is turning in is less so. I'm sure it's available in the literature somewhere, but I figured out a scheme using flip-flops to assert a "direction" line. Coming up with the toothed wheel itself was

another issue--especially for someone as mechanically disinclined as I am.

I found out that things like paper, cardboard and even popsicle sticks aren't necessarily opaque to infrared. Concidentally, I smashed open a digital bathroom scale around that time to look at the strain gauges.

Surprise--it had a wheel with the alternating opaque and transparent segments in it--plus the infrared LED, detector pairs. So my bathroom scale became part of my high-tech VFO. The "analog knob", as I called it, worked great too.

It worked really well on my Corsair 1. One of these days, I'm gonna incorporate it in some new project.

It was funny reading those initial DDS articles. They proclaimed the new technology as the cure for all synthesizer ills--there was no settling time, no hunting, no jitter, no phase noise. But later, the new technology became passe', I guess, and now you hear of PLLs to "clean up" the DDS unit. Hmmm ... I have yet to build my first PLL/VCO, but I'm gonna do the Flying Pigs unit one of these days.

72 and happy frequency synthesis--

Nick, WA5BDU
in Arkansas

Date: Thu, 3 May 2001 00:48:19 -0400 (EDT)
From: JOHN FISHER <ve7fdg@mad.scientist.com>
To: Low Discussion <grp-l@Lehigh.EDU>
Subject: [97545] test no need to read
Message-ID: <385492384.988865299943.JavaMail.root@web597-mc>
Mime-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

9:46 010502
ve7fdg@mad.scientist.com
2137 duggan rd
nanaimo bc V9S 5N9
canada

FREE Personalized Email at Mail.com
Sign up at <http://www.mail.com/?sr=signup>

Date: Thu, 3 May 2001 01:32:19 -0400 (EDT)
From: George Gingell <k3tks@u1.abs.net>

To: QRP List <qrp-1@Lehigh.EDU>
Cc: Paul Harden <pharden@aoc.nrao.Edu>
Subject: [97546] Re: [OT] Mysteries of 30-Meters
Message-ID: <Pine.BSF.4.33.0105030121560.41941-100000@u1.abs.net>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

I thought that I would share my Thoughts as I read your comments on the Numbers Stations on 30 Meters. First, They are probably just sending code practice. :^} (Whose code?)

Then when you posted the 5 digit groups and stated that they decoded to "72" I really fell out. Actually a couple were in "Plain Text" :^}

Then I thought, naw they are really just a listing of used Lock Biting Codes. Never thought of that before, but I have lots of old Lock job masterkey biting listings that would make great code practice.

Old QRP Contest logs are another great source of Code Practice material.

House keys decoded FREE :^}

Sir George, The First :^}

72 ES

QRP DX TU (C) 1986, G. "Danny" Gingell, K3TKS@ abs.net
Former QRP A.R.C.I. Net Manager and Board of Director Member.
Gingell & Company, Ltd. Small Business Telephone Systems
Notary Public and Commercial Locksmith Services (301) 572-6789 Office & Fax
George D. Gingell, Jr. 3052 Fairland Road, Silver Spring, MD 20904-7117
Maryland Milliwatt Club QRP Reference Library, (301) 572-6789 IQRR #1
Maryland Milliwatt Club Founder and Trustee of Club Station - WQ3RP -
Grid Square FM19mb 76.94 W - 39.06 N Silver Spring, MD 20904 QRPea.A.

"72" = "Wishing You Good QRP" (C) 1991 Oleg Borodin, RV3GM

Date: Wed, 2 May 2001 23:38:48 -0600
From: "Niels" <nkristja@cadvision.com> (by way of Niels Jensen Kristjansson <nkristja@cadvision.com>)
To: qrp-1@Lehigh.EDU
Subject: [97547] QRPTTF From The Great White North.
Message-ID: <1.5.4.16.20010502233927.5df708f2@cadvision.com>
Mime-Version: 1.0

Content-Type: text/plain; charset="us-ascii"

Hi gang,

The Calgary QRP group decided to participate in QRPTTF2001 although less than half the gang was able to come out and play this time around. This year we were invited to come out to Pat's place (VE6AAN) and throw some wires in his trees. This is in the country (N 52 37.19 W 113 18.86) and located on the property are not one but two ancient wooden monoliths. The area is also known for UFO sightings and to add to this there is a UFO landing platform in one of the near by towns (name escapes me at the moment). We arrived at 10:45 local time and set up an Icom 725 adjusted to just under 5W and got a 20m folded dipole up 30' in the trees. Tuning around we found no sign of a contest? What is going on here? Conditions are non existent, but Paul said!!!

Well time for lunch anyway, we can at least eat and be happy if nothing else. It was decided as a devious tactic to use the name HAL (after HArold, ok ok so it is a little far fetched) because we knew not everyone had the list of bonus

stations and we would attract more QSO's. HAL (HArold) never showed so we promptly named on of Pat's cat HAL to save our conscience. Since we were using Pat's call we were not to worried about our reputation anyway.

We worked sporadic 6 hours and managed 37 contacts resulting in calculated 37,760 points. The QSB was very deep and fast, K8CN dissapeared on me so fast that I only got his call and 559 before he faded away. At one point we were using

K0EVZ and AA5B as beacons, if they were not working anybody we would not bother calling CQ. These two stations were constantly 599 and stood out like, dear I say, monoliths.

We may be far north in the black hole of RF but the WX was T-shirt type and a light

breeze and sunny until on the way home when we almost hit two deer and got pounded

by a lightning storm. Great fun was had by all and thanks to all the stations we managed

to contact, it was rough going at times but we call it a character building experience.

Until next year.

72 de Niels
VE6NJK
Calgary, AB

PS: Paticipants were Pat VE6AAN, Tom VE6OBA, Kam VE6NGK, John VE6QSL
Niels VE6NJK and HAL the cat. Special thanks to Jennifer (XYL of VE6AAN)

for the great food and putting up with a yard full of radio nerds
(read QRP-ers).

```
<!DOCTYPE HTML PUBLIC "-//W3C//DTD HTML 4.0 Transitional//EN">
<HTML><HEAD>
<META content="text/html; charset=iso-8859-1" http-equiv=Content-Type>
<META content="MSHTML 5.00.2614.3500" name=GENERATOR>
<STYLE></STYLE>
</HEAD>
<BODY bgColor=#ffffff>
<DIV>&nbsp;</DIV>
<DIV style="FONT: 10pt arial">----- Original Message -----
<DIV style="BACKGROUND: #e4e4e4; font-color: black"><B>From:</B> <A
href="mailto:nkristja@cadvision.com" title=nkristja@cadvision.com>Niels</A>
</DIV>
<DIV><B>To:</B> <A href="mailto:qrp-canada@lists.gpfn.sk.ca"
title=qrp-canada@lists.gpfn.sk.ca>Multiple recipients of list QRP-CANADA</A>
</DIV>
<DIV><B>Sent:</B> Tuesday, May 01, 2001 7:11 PM</DIV>
<DIV><B>Subject:</B> QRPTTF From The Great White North.</DIV></DIV>
<DIV><BR></DIV>
<DIV>&nbsp;</DIV>
<DIV>&nbsp;</DIV>
<DIV><FONT face=Arial size=2>Hi gang,</FONT></DIV>
<DIV>&nbsp;</DIV>
<DIV><FONT face=Arial size=2>The Calgary QRP group decided to&nbsp;participate
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<DIV>KØEVZ and AA5B as beacons, if they were not working anybody we would not </DIV>
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<DIV>to contact, it was rough going at times but
we call it a character building experience.</DIV>
<DIV> </DIV>
<DIV>Until next year.</DIV>
<DIV> </DIV>
<DIV>72 de Niels</DIV>
<DIV>VE6NJK</DIV>
<DIV>Calgary, AB</DIV>
<DIV> </DIV>
<DIV>PS: Participants were Pat VE6AAN, Tom VE6OBA, Kam VE6NGK, John VE6QSL</DIV>
<DIV> &Niels VE6NJK and HAL the cat.
Special thanks to Jennifer (XYL of VE6AAN)</DIV>
<DIV> &for the great food and putting up with a yard full of radio nerds (read QRP-ers).</DIV>

<DIV> </DIV></BODY></HTML>

Date: Wed, 2 May 2001 23:40:03 -0600
From: "Jerry McCollom" <w0mc@hotmail.com>
To: "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [97548] Re: Epiphyte 3 kit, MS-15 kit
Message-ID: <0E8p7mvjk022ZhCl8ai00000192@hotmail.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Both kits are now spoken for. Thanks for the inquiries!

73,

Jerry
W)MC

Date: Thu, 3 May 2001 02:14:35 EDT
From: RangerSF5@aol.com
To: qrp-L@lehigh.edu
Subject: [97549] Thank Guys
Message-ID: <3c.b18b4f0.2822514b@aol.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="US-ASCII"
Content-Transfer-Encoding: 7bit

Many thanks to all who took the time to write all the letters about the bi-directional diodes.
Between all the letters explaining what they are, what they do, how they operate and how to check them,
You all helped get a non ham to get his auto A/C ATC system working again.
He also sends his Thank You to all of you.
Bob
WA2HOQrp <tm>

Date: Wed, 2 May 2001 09:56:56 -0400
From: "Mike Yetsko" <myetsko@insydesw.com>
To: <jennings@eznet.net>, "Low Power Amateur Radio Discussion" <qrp-l@Lehigh.EDU>
Subject: [97550] Re: New Kind of Batter coming soon

Message-ID: <015e01c0d30f\$ca102600\$4206d10a@endpoints.com>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

VERY interesting... Hmm, does recharging means hooking it up
to a tank of gas...

Seriously, one issue with fuel cells is the 'startup' procedure, and
their waste products (could just be water). Be real interesting to
see a laptop with a drain hose...

It will remain to see the technology, and how it works.

Like I said, interesting.

On another note... There is a company in CA that has some new
kind of cell technology. I know a LOT of bikers are going over
to it from Lead Acid. In fact, my friends new Honda came with
the thing. Wonder how that would work for camping and the K2?
Only thing is, bikes are 'different'. They need HIGH current for
short burst, and have an IMMEDIATE and complete recharge.

Mike

> Gang,
> I thought you all may be interested in what I read
> in this weeks EE Times. There is an article stating
> that manufacturers are getting ready to release a fuel cell
> scaled down to be used in laptops. The cells should be ready in a year.
>
> Sorry about the lack of details but the paper is at home and I can't
> get to EE Times web site to extract some quotes.
>
> 73,
> Tom kv2x

Date: Thu, 3 May 2001 01:05:07 -0700 (PDT)
From: "Robert P. Okas" <vintage@best.com>
To: Nick Kennedy <nkennedy@tcainternet.com>
Cc: qrp-1@lehigh.edu
Subject: [97551] RE: [MH101] DDS VFO instead of a crystal
Message-ID: <Pine.BSF.4.21.0105030037210.10213-100000@shell114.ba.best.com>

MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Hi Nick,

Great story! I had a chance to evaluate an Analog Devices 9850 evaluation board. Man, did that thing have lots of spurs on the spectrum analyzer! I remember that keeping the output frequency well below Nyquist helped reduce the number and amplitude of the spurs, but that wasn't what the project required. PLL's to the rescue!

In a recent project, I had to develop an arbitrary waveform generator that worked up to about 50 KHz or so. I found a 1K fifo with a recirculate option. Load it once, and with a little logic, it could be made to repeat the waveform ad infinitum. I couldn't find a VCO with the specs I needed, so I wound up designing a fractional divider, the front-end of a DDS, into an FPGA. It works great and provides sub-Hz frequency resolution. Never have needed to look at the output spectrum...

Into the same FPGA, I worked in a position encoder. These measure linear displacement vs. shaft rotation, but the idea is the same. The encoder puts out 2 square wave signals, A and B, which are in quadrature, i.e. 90 degrees apart. One could use the "B" phase as the up/down signal to a counter, with the A phase for the clock. In my application, I had to clock off of the rising and falling edges of both A and B to develop a 4x clock for added precision. This required goodly number of flip flops just to determine the direction!

In this day, one can write some VHDL code to implement the digital part of a DDS vfo in an FPGA and not have to touch a wirewrap gun. I do miss those old Gardner-Denvers, though...

73,
Bob - W3CD

Who just got an idea for a "G" job.

On Wed, 2 May 2001, Nick Kennedy wrote:

>
> > >Maybe someone could design something along those lines:a fully
> > >adjustable DDS VFO with outboard computer control.
>
> I made one of those DDS things a long time ago. It may have been from the
> first DDS article to ever appear in QST, back in April 1984. Once I sort
> of figured out how the thing worked, it was so cool I just had to build
> one. Not doubt it was the stone axe of DDS technology compared to what's
> out there today. A separate PROM stored the sine wave data. There were

> shift registers to bring in the frequency data, bit-banging style (no
> UART), and three 8-bit latches to store it. I added three more latches so
> I could store separate transmit and receive data and an extra control line
> to do the T/R frequency toggle..
>
> The thing could only go to 7.5 Mhz, in accordance with Mr. Nyquist's
> dictates. Mine was set up to do 5.0 to 5.5 MHz and act as a second VFO for
> my Ten-Tec Corsair 1. I built the whole mess on a huge perf-board using
> wire-wrapped connections. (Another first for me.)
>
> The next interesting thing was the software. I'd messed around with
> assembly language programming for a while and fancied myself an expert. So
> I wrote a pound or so of 8086 code to control this thing from the PC in
> DOS. It worked great. I added all the bells and whistles available on the
> current Kenwood/Icom/Yaesu rigs--RIT, XIT, memories, memory scan, band
> scan, variable steps, and so on. Slick.
>
> But using the Up and Down arrow keys to change frequency is not acceptable
> to someone who grew up on boatanchors with their big tuning knobs. So I
> had to figure out a way to encode the turning of a wheel. Having a toothed
> wheel break a light beam is pretty obvious, but the circuit to decide which
> direction the knob is turning in is less so. I'm sure it's available in
> the literature somewhere, but I figured out a scheme using flip-flops to
> assert a "direction" line. Coming up with the toothed wheel itself was
> another issue--especially for someone as mechanically disinclined as I am.
> I found out that things like paper, cardboard and even popsicle sticks
> aren't necessarily opaque to infrared. Concidentally, I smashed open a
> digital bathroom scale around that time to look at the strain gauges.
> Surprise--it had a wheel with the alternating opaque and transparent
> segments in it--plus the infrared LED, detector pairs. So my bathroom
> scale became part of my high-tech VFO. The "analog knob", as I called it,
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>
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> incorporate it in some new project.
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> It was funny reading those initial DDS articles. They proclaimed the new
> technology as the cure for all synthesizer ills--there was no settling
> time, no hunting, no jitter, no phase noise. But later, the new technology
> became passe', I guess, and now you hear of PLLs to "clean up" the DDS
> unit. Hmmm ... I have yet to build my first PLL/VCO, but I'm gonna do the
> Flying Pigs unit one of these days.
>
> 72 and happy frequency synthesis--
>
> Nick, WA5BDU
> in Arkansas
>

Date: Thu, 3 May 2001 06:09:30 -0400
From: "Terres Family" <terresfm@ncia.net>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97552] hosstraders
Message-ID: <002801c0d3b9\$2594e7a0\$5482f3ce@computer>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

i plan to be there either late friday, i.e. after the admission price goes
down

(or on saturday depending on how work is friday)

i'll monitor 147.52 but my alinco ht is QRPp

jerry terres aa1of
franconia nh

Date: Thu, 03 May 2001 08:17:14 -0400
From: Chuck Ludinsky <cjl@mitre.org>
To: neqrp@jonal.net, qrp-1@lehigh.edu
Subject: [97553] NEQRP CW Net, Thursday, 3 May, 9:00 PM EDT, 3.561MHz
Message-ID: <3AF14C4A.FE5335B4@mitre.org>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

The New England QRP Club's WQ1RP CW net meets again Thursday night, 3
May 2001, at 9:00 PM EDT (0100Z, 4 May 01) on or near 3.561 MHz. Net
control operator for this week's 80M session will be Chuck, K1CL,
operating from Chelmsford, MA.

Dennis, K1LGQ, operating from Brookline, NH, was the Net Control Op for
last week's session. Check-ins included:

K1RC	John	Dracut, MA
W1FMR	Jim	Salem, NH
K1CWZ	Spy	Nashua, NH
WB1HBE	John	Chelmsford, MA
W1KRT	Ken	Springfield, NH

KE3FL	Phil	Mount Airy, MD
N1ZSW	Ron	Worcester, MA
N1EI	Charlie	Mansfield, CT
W3KSQ	Charles	Pocono Summit, PA
K1LGQ	Dennis	Brookline, NH (Net Control Station)

Dennis reports that "Overall, everyone had a 599 plus 10 dB over 9 signal. I was very impressed with the strong signals. My only "hard to copy" station was Phil - KE3FL, however, his 2 watt signal became louder as he continued to transmit. Throughout the net, I tried to keep the speed down in hopes that it might attract other check-ins. Sometimes it's harder to go slower, but we try to do our best. Good job net and you all did very well!"

Hope the excellent signal conditions continue into tonight's session. With strong AC RFI in my neighborhood, I'll need them.

72 DE K1CL,
Chuck.

Date: Thu, 3 May 2001 08:28:43 -0400
From: wb2vuo@juno.com
To: qrp-l@lehigh.edu
Subject: [97554] RE: New Kind of Battery coming soon
Message-ID: <20010503.082845.-366689.0.wb2vuo@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

I checked out the link, and that looks like the neatest thing since sliced bread. The 15 watt level will run almost any QRP gear out there, and it's (mostly) Environmentally-friendly...

The methanol-powered fuel cells, this from an NPR Science Friday article last year, emit water vapor, carbon dioxide and a small quantity of carbon monoxide. Oh yeah, electricity, too...

Now, this produces an interesting scenario, a laptop (or QRP station) that need good ventilation (from the CO & CO2 emissions) and a diaper for the condensate. Where does one collect the H2O vapor in the equipment case, and if you vent it to the outside can someone prohibit using your fuel-cell'd laptop because it's blowing off steam???

Just a thought...

72/73, Keith, WB2VUO, 100% QRP from the Depths of the Great Bergen Swamp
President, Brockport Amateur Radio Klub & Tech Coordinator, ARRL WNY
Section

My night light runs more power than my Rig!!!

Replies - <mailto:wb2vuo@arrl.net>

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<http://dl.www.juno.com/get/tagj>.

Date: Thu, 3 May 2001 09:08:50 -0400

From: "Ed Tanton" <n4xy@att.net>

To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>

Subject: [97555] FW: [FISTS] for sale

Message-ID: <CKEGICNFDIMCEKEDCEHFMEBOHAAA.n4xy@att.net>

MIME-Version: 1.0

Content-Type: text/plain;
charset="US-ASCII"

Content-Transfer-Encoding: 7bit

Don't know Hector, but thought you all might be interested.

73 Ed Tanton N4XY <n4xy@arrl.net>

website: <http://www.n4xy.com>

LM: ARRL QCWA AMSAT & INDEXA;

SEDXC NCDXA GACW QRP-ARCI

OK-QRP QRP-L #758 K2 (FT) #00057

R-390: Motorola SN: 374;

R-390-A: Capehart SN: 2241

51S-1 WE SN: 4389

HRO-50; HRO-60; & HRO-500

SP600-VLF SP600-JX-17 SP-600-JX-21

>-----Original Message-----

>From: owner-fists@qth.net [mailto:owner-fists@qth.net] On Behalf Of

>Hector E. Perez Diaz

>Sent: Thursday, May 03, 2001 4:42 AM

>To: fists@qth.net

>Subject: [FISTS] for sale

>

>

>I am selling my HW-8 QRP \$125.00 flat price with manual. Anyone

>interested plwase contact Hector np4fw@isla.net

>

>Best to all

>

>---

>Submissions fists@qth.net

>

Date: Thu, 3 May 2001 09:16:41 -0400

From: "Ed Tanton" <n4xy@att.net>

To: "QRP-L Reflector" <qrp-l@Lehigh.EDU>

Subject: [97556] FW: Seven Billion Miles and Counting TALK ABOUT MILES-PER-WATT!!!

Message-ID: <CKEGICNFDIMCEKEDCEHFMEBPAAAA.n4xy@att.net>

MIME-Version: 1.0

Content-Type: text/plain;

charset="iso-8859-1"

Content-Transfer-Encoding: 7bit

73 Ed Tanton N4XY <n4xy@arrl.net>

>To: NASA Science News

>Subject: Seven Billion Miles and Counting

>

>

>NASA Science News for May 3, 2001

>

>Last week NASA received a weak signal from Pioneer 10, twice as far

>from the Sun as Pluto and speeding toward the constellation Taurus. The

>well-traveled spacecraft is currently exploring the outer heliosphere, but

>soon it will take on a new job: ambassador to the stars.

>

>

>

>

>FULL STORY at

>

>http://science.nasa.gov/headlines/y2001/ast03may_1.htm?list98444

>

>

>---

>Home page: <http://science.nasa.gov>

Date: Thu, 03 May 2001 09:53:01 -0400
From: Kenneth Hoglund <hoglund@wfu.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97557] OT: Rcvrs for Evesdropping (was 30M Mysteries)
Message-ID: <3AF162BC.FAF4F757@wfu.edu>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

All this dialogue on "numbers stations" got me to wondering just what kind of high-potency receivers our spy planes carry on-board? Wouldn't they be great for pulling weak QRPP sigs out of the ether?

Anyone out there know or see some reference to what the plane in China was carrying?

73

Ken KG4FGC

Date: Thu, 3 May 2001 09:37:55 -0500
From: "Rick Austin" <rick@ltcable.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97558] Cost/Benefit Analysis of Iambic Paddle
Message-ID: <005a01c0d3de\$a5db7f80\$a80aa8c0@ricksnote>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm looking to buy an Iambic Paddle and lean to sending with it and a keyer. The sheer number of options from low cost to veddy expensive are confusing the heck out of me.

Those little mini-paddles are very inexpensive but should I learn on one? OTOH, it's not too hard to spend a hundred bucks (or more) on a nicely machined dual paddle but do I need to spend that much, first crack out the box?

The conventional wisdom is that paddle selection is very subjective.

Allowing for that fact, there must be some general guidelines to follow. I would like to split the difference between cheap and small and large, heavy and expensive. I need a "first" paddle to learn on without breaking the bank or learning bad habits due to the lack of adjustability of the tiny ones.

Help, please!

Rick Austin
KD5LAQ

Date: Thu, 03 May 2001 10:51:09 -0400
From: Bruce Muscolino <w6toy@erols.com>
To: rick@ltcable.com
Cc: Low Power Amateur Radio Discussion <qrp-l@lehigh.edu>
Subject: [97559] Re: Cost/Benefit Analysis of Iambic Paddle
Message-ID: <3AF1705D.EFD83E41@erols.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Rick,

The purchase of an Iambic paddle is a highly subjective thing. There are cheap paddles and there are those that you have ot mortgage you first born to own. Which should you choose?

At the risk of causing a flame war, I would say the eventual quality of the code you send will be a direct function of the paddle. Paddles like keys should be heavy enough to not move around. And they should be adjustable!

Look carefully at the inexpensive paddles any you will see that most of them are not very sturdily built. They're adjustments are not very fine. Look at the more expensive paddles and you will see the opposite condition.

I would suggest you purchase a middle of the road paddle like either the Bencher ot the Vibroplex Code Warrior. They are sturdy, adjustable, and not real expensive. My favorite is the Bencher but I have owned and used one for 20 years! The Code Warrior is a commercial adaptation of the NorCal paddle.

The very expensive paddles like the VBL are mostly a waste of money for someone starting out. Much of their mystique comes form guys like Chuck Adams who have years of experience sending code using a paddle. You don't and you want a sturdy paddle to let you learn.

Date: Thu, 3 May 2001 09:03:29 -0600
From: William R Colbert <w5xe@juno.com>
To: qrp-1@lehigh.edu
Subject: [97560] Re: [OT] Mysteries of 30-Meters (LONG!)
Message-ID: <20010503.090330.-399499.0.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Lots of wrong answers and info re: this topic. A lot of the info is carried in the header of the message and the identifying info of the particular illicit/clandestine originator be it the CIS, FRB(old KGB) GRU or some of the other former block nations is also in the header and ending of the message. Normal group is 5 figures or as some of the so called experts on the spooks lists refer to the voice numbers broadcasts as 3x2 five figure because of the inflection between the 3rd and 4th figure of the group. Some of the 4 figure group broadcasts are attributed to U.S. intel agencies, some to the various Central, South American or Caribbean nations. Some are for practice, but the information for whether or not the message will be a dummy or valid will be in the header. With an ender of 5 cut zeroes it can be either the old KGB or GRU systems. The loudness can be attributed to a GRU facility located not too far distant to the U.S. and it handles not only Russian but other countries (friendly/allied with them) as well. There is usually a rotating schedule of frequencies and times - a lot of their people are travelling and need to check the receiving conditions in their areas of interest. And so as not to give any advanced indications, they will continue the broadcasts whether or not there is an intended target.

The estimate given by NSA, GCHQ, and I think also the CSRB (Canadian Scientific Research Bureau) for breaking a one time pad message - without a compromise - using at the time of the tests a Cray computer, is in excess of 100 years. There are literally millions of messages in storage awaiting for some sort of little compromise from some other nets, services or human source so they may apply that to some message and at least get the historical info - maybe even help to break something current.

Receivers on the plane could be Watkins Johnson 8718/ 8716 / 8712 or similar halfrack receivers covering lf up thru 500 Mhz minimum - some go higher. The low hf ranges are used as the Chinese lower echelon radio systems are similar to what the Russian/soviet systems were years ago - platoon and squad in the 3 mhz range, platoon to higher headquarters in the 4-5 and higher headquarters units in the 6-8 range, maintaining only contact with the designated unit. Then you have the trick of the mid level units using a low density microwave circuit for their cw link to the transmitter which may move it many miles from where the unit is actually located.

There are a number of lists and websites devoted to this subject. And it occurs not only on 30 meters but the entire spectrum - We used to get broadcasts into this area on 100 Mhz on occasion.

73

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<http://dl.www.juno.com/get/tagj>.

Date: Thu, 03 May 2001 11:27:32 -0400

From: "Mark J. Dulcey" <mark@buttery.org>

To: rick@ltcable.com

Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>

Subject: [97561] Re: Cost/Benefit Analysis of Iambic Paddle

Message-ID: <3AF178E4.A5E99565@buttery.org>

MIME-Version: 1.0

Content-Type: text/plain; charset=us-ascii

Content-Transfer-Encoding: 7bit

Rick Austin wrote:

>

> I'm looking to buy an Iambic Paddle and lean to sending with it and a keyer.

> The sheer number of options from low cost to veddy expensive are confusing
> the heck out of me.

>

> Those little mini-paddles are very inexpensive but should I learn on one?

> OTOH, it's not too hard to spend a hundred bucks (or more) on a nicely

> machined dual paddle but do I need to spend that much, first crack out the

> box?
>
> The conventional wisdom is that paddle selection is very subjective.
> Allowing for that fact, there must be some general guidelines to follow. I
> would like to split the difference between cheap and small and large, heavy
> and expensive. I need a "first" paddle to learn on without breaking the bank
> or learning bad habits due to the lack of adjustability of the tiny ones.

If you're trying to keep the budget down, hit the hamfests! You can probably find a nice used Bencher or Brass Racer for under \$50 (half the cost of a new one); either will provide years of happy keying. (There might be other things out there as well, but those are the most popular models.) And even if you get one of the mini models later for field use, they will feel right at home at your home station; their weight means they will stay put on your operating table without needing to be screwed into place.

Look over your prospective paddle for signs of abuse; in particular, make sure nothing evil was done to the contact surfaces. (They are gold-plated on most modern designs; you want the plating to be intact. Modern CMOS keyer circuits use VERY low current, so the gold plating is important for reliable keying.) Don't worry too much about scratches in the paint, though; you're buying this paddle to USE, not for show. (There are collectors out there who pay, and charge, big bucks for paddles and keys in mint condition; you don't want the stuff they're selling.) Then try it out tentatively for feel. It probably won't feel perfect to you, because it's been adjusted for the preferences of the previous owner, but you want a paddle that moves easily and feels smooth.

As for the keyer, if your rig doesn't have one built in, there are a lot of inexpensive options, such as kits using the TiCK or Curtis chips. (The TiCK keyers are nice for ultra-compact installations; the Curtis chips are better if you like old-fashioned control knobs.) You can get standalone boxes, or small circuit boards designed for building into your rig. Or you can buy a fancy memory keyer at the hamfest if you want; it may come in handy if you plan to get into contesting. (Lots of contesters use automatic sending from their logging software rather than a keyer.) Basic keyers don't show up much; they're too cheap to be worth the trouble of trotting out to sell, and their owners probably tend to keep them anyway. If someone IS selling a basic non-memory keyer, it should sell for under \$10.

All that being said, I recently got one of the new Palm mini-paddles; it's very nice, and you probably could learn on one. The main drawback is that it's probably less tolerant of abuse than a full-size paddle; it might not be the best thing to use before you unlearn the straight-key habit of pushing the thing around. (You should use a very light touch on

the paddle; you operate it with finger movements, not wrist movements.)

Date: Thu, 3 May 2001 11:29:26 -0400
From: Rick Robinson <rerobins@email.uncc.edu>
To: hوجلund@wfu.edu
Cc: qrp-1@lehigh.edu
Subject: [97562] Re: OT: Rcvrs for Evesdropping (was 30M Mysteries)
Message-ID: <v03102803b717230283ae@[152.15.144.71]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Ken, KG4FGC writes;

>Anyone out there know or see some reference to what the plane in China
>was carrying?

It's a safe bet that all the gear on an EP-3 is highly classified. One thing planes like that seem to do is fly close enough to a country to have the radar in that country lock on to the plane. Then the receiving and analyzing gear go to work on the "captured" radar signals. This is very beneficial in the design of radar jamming and false imaging systems. The big daddy of surveillance planes are the AWACS which the US Navy has based at Tinker AFB, OK, and other sites in the US. The capture of the EP-3, while a security disaster, is not close to the magnitude that the capture of an AWACS would be. This Boeing Aircraft page has some nice images of various AWACS configurations.

<http://www.boeing.com/companyoffices/gallery/images/infoelect/awacs.html>

If you're looking for a good HF receiver to intercept utility stations, the Drake R8 series, and the NRD 500 series receivers are all considered excellent receivers for these uses. Both are highly regarded in the SWL community. If you're a boatanchor fan, a properly aligned R-390A has no peer and is still found in use by the military and various security agencies in the US. They are available in the surplus markets in the \$300 - \$800US depending on the condition and manufacturer. Fair Radio in Ohio still has R-390As in their current catalog. The R-390A has a very loyal following similar to the Elecraft K1/K2.

The US military seems to favor Harris and Watkins-Johnson receivers these days. Both brands show up on the surplus market and also on some of the on-line auction sites. I'd be willing to bet there were either Harris or W-J receivers on the EP- 3 along with other assorted high-tech ECM and RF snooping goodies.

72,

Rick kf4ar

Date: Thu, 3 May 2001 08:38:29 -0700
From: Tayloe Dan-P26412 <Dan.Tayloe@motorola.com>
To: "'adamvaz@palm.net'" <adamvaz@palm.net>
Cc: "QRPL (E-mail)" <qrp-l@lehigh.edu>
Subject: [97563] [MH101] DDS VFO instead of a crystal
Message-ID: <87568F78ABDCD211A0AC0008C707718B029D127C@az10exm03.sat.mot.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

Adam:

A DDS VFO is a nice touch in that it is very stable. However, it is not by any means a clean frequency source. A test of the "goodness" of a frequency source is the noise in its sidebands. Go on line to the Elecraft webpage and look at the specs of a K2. There you will find at 10 KHz from the carrier, the VFO has noise about 124 db (pulled from memory) down from the VFO carrier.

Go to the Analog Devices home page (<http://www.analog.com/>) and look up the specs for the AD9832 DDS chip. Notice that it has spur specs of -72 db down within 50 KHz of the center frequency.

A DDS VFO obviously works and folks that have these rigs with them are very pleased with them. However, they are not intended to be super clean, high performance rigs. These rigs work very well under most conditions and represent a design compromise that a lot of folks are happy to live with.

- Dan Tayloe, N7VE; Phoenix, Az; Az ScQRPions

Hello de Adam Kb2Jpd

About several years ago, I was investigating several designs for a DC-to-daylight homebrew transceiver.

Central to the theme was the radio reception was to be as quiet as possible. I researched about as much of radio design as I could.
(courtesy of the Handbook and Doug McCaw)

Then I saw in a British ham/electronics rag standalone RF modules from

a forgotten catalogue.

Numerically Controlled Oscillators, wide-band mixers, and RF bricks.

Maybe someone could design something along those lines: a fully adjustable DDS VFO with outboard computer control. The neat thing about using DDS is you could do practically any type of modulation.

Any takers, please ??

Adam Kb2Jpd

Date: Thu, 3 May 2001 09:39:43 -0600 (MDT)
From: "Karl F. Larsen" <k5di@zianet.com>
To: William R Colbert <w5xe@juno.com>
Cc: Low Power Amateur Radio Discussion <qrp-l@Lehigh.EDU>
Subject: [97564] Re: [OT] Mysteries of 30-Meters (LONG!)
Message-ID: <Pine.LNX.4.33.0105030934300.1945-1000000@localhost.localdomain>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Much of what you can't determine the source of is "pactor" Internet relay stations. I use a station near Dallas for my Internet when camping in the summer months. It is well developed and works just fine. There is no Russian or Chinese spooks on 30 meters. All spooks now use the Internet to send home data encrypted by a one-time-pad which is the perfect encryption, unless the pad is lost...:-)

I worked 4 years with the CIA and know how it's done.

On Thu, 3 May 2001, William R Colbert wrote:

> Lots of wrong answers and info re: this topic. A lot of
> the info is carried in the header of the message and the
> identifying info of the particular illicit/ clandestine originator

--
Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 3 May 2001 09:45:34 -0600
From: William R Colbert <w5xe@juno.com>
To: k5di@zianet.com, qrp-1@lehigh.edu
Subject: [97565] Re: [OT] Mysteries of 30-Meters (LONG!)
Message-ID: <20010503.094534.-399499.1.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Well, I will not get into a discussion of the matter
but Karl, after working for more than 35 years for
3 out of the 4 alphabet agencies, I beg to differ with
you on that statement of NO Russian or other spooks
on 30 - absurd.

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<http://dl.www.juno.com/get/tagj>.

Date: Thu, 3 May 2001 08:55:35 -0700
From: "Roger A. McCarty" <rmccarty@earthlink.net>
To: <rick@ltcable.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97566] RE: Cost/Benefit Analysis of Iambic Paddle
Message-ID: <NBEDJCBBKGGMMPNBDCK00EBCCEAA.rmccarty@earthlink.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I would agree whole heartedly with those posts that I have read so far.
Although in some circles the benchner gets a bad rap, for a good quality,
every day use and / or learning paddle, it is superb. I also have used a
benchner for over 20 years, and although I have other, very expensive
paddles, the benchner gets used for perhaps 90 per cent of the time on the
air.

Whatever you decide, I would recommend getting a dual (Iambic) paddle. It
provides the option of squeeze or single paddle keying and will provide you
with the tools to use either, as your skills improve.

Roger KD6CC

>-----Original Message-----

>From: owner-qrp-1@Lehigh.EDU [mailto:owner-qrp-1@Lehigh.EDU] On Behalf Of
>Rick Austin

>Sent: Thursday, May 03, 2001 7:38 AM
>To: Low Power Amateur Radio Discussion
>Subject: Cost/Benefit Analysis of Iambic Paddle
>
>
>I'm looking to buy an Iambic Paddle and lean to sending with it
>and a keyer.
>The sheer number of options from low cost to veddy expensive are confusing
>the heck out of me.
>
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>box?
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>The conventional wisdom is that paddle selection is very subjective.
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>would like to split the difference between cheap and small and large, heavy
>and expensive. I need a "first" paddle to learn on without
>breaking the bank
>or learning bad habits due to the lack of adjustability of the tiny ones.
>
>Help, please!
>
>Rick Austin
>KD5LAQ
>

Date: Thu, 3 May 2001 12:51:17 -0500
From: "Rick Austin" <rick@ltcable.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97567] Re: Cost/Benefit Analysis of Iambic Paddle
Message-ID: <00a001c0d3f9\$a9e44240\$330aa8c0@ISS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Wow!!! The number of responses to my original question (many sent privately) has been overwhelming. Many were long and detailed. I should have asked sooner and I would have saved myself a whole lot of time browsing the Web. Thanks to everyone who responded.

A pattern has started to emerge. I need to avoid starting out on a mini-paddle. Better to begin on an adjustable model and learn good sending

habits. Expensive paddles are great if you have the money but there was a consensus of opinion that a Bencher would do me just fine to start with and maybe even stay with.

Here are a few representative comments regarding my next step in this process:

>The small, inexpensive paddles are fine for backpacking, but might not be
>appropriate for learning. I recommend the basic black Bencher paddle.

> Try the Bencher .. see if you
> like paddles .. sell the Bencher .. upgrade to something else later .. a
> whole world of keys / paddles out there!

>Go on eBay and pick up a used Bencher or Vibroplex. If you don't like it,
>you can always unload it for what you paid.

> If \$100 is still to spendy, then post a WTB (wanted to buy) ad on QRP-L
> with a price limit of what ever you can afford to spend. You'll get FS
> offers for old Benchers and other functional stuff ;)

>If you're trying to keep the budget down, hit the hamfests! You can
>probably find a nice used Bencher or Brass Racer for under \$50 (half the
>cost of a new one); either will provide years of happy keying.

> Look for a used Bencher paddle for about \$35 and you won't be sorry.
>

What are they trying to tell me? What? Oh, I get it! "Buy a Bencher! Don't pay too much for it."

I think I will take their advice....and ask, does anyone want to part with a surplus basic black Bencher in good condition for \$35-50?

Rick Austin
KD5LAQ

Date: Thu, 03 May 2001 13:08:00 -0500
From: "Ed Manuel (N5EM)" <n5em@flash.net>
To: hqrp@stevens.com
Cc: hats@stevens.com, qrp-l@lehigh.edu
Subject: [97568] Fwd: Re: [RMG] FDIM Ride Available from Houston
Message-ID: <4.3.2.7.2.20010503130729.00be2100@pop.flash.net>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"; format=flowed

The seat is taken. See y'all in Dayton.

Ed

Date: Thu, 3 May 2001 19:14:40 +0100
From: Euramcom <mel@euramcom.freeseerve.co.uk>
To: <qrp-1@lehigh.edu>
Subject: [97569] the 2\$ gallon!
Message-ID: <E14vNhE-0007nr-00.2001-05-03-19-19-24@cmailg7.svr.pol.co.uk>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

Well Gangue,

Think yourselves lucky in the land of the free because we must be=
in
the home of the brave here in the UK

Current price of a gallon of (gas) petrol is around =A33.85 (UKp)=
which
is also about the same as the price of diesel oil. At the current=
rate of exchange that equates to about \$5.50 (USd)

Oh, and ISTR you use bigger Gallons in the states than we do here=
in
Imperial measure.

Regards

--72 and 73 de Mel Evans, e-mail mel@euramcom.freeseerve.co.uk

Mel Evans GM6JAG Edinburgh Scotland
Home of the last HW9

Visit <http://www.euramcom.freeseerve.co.uk> for
US Euro Ham Radio Equivalent Parts and info,
Add-a-Link page let's you add your own pages instantly

Date: Thu, 3 May 2001 14:31:40 -0400
From: "John Nall" <nally@talstar.com>
To: <qrp-1@lehigh.edu>
Subject: [97570] Battery cable - a query
Message-ID: <003701c0d3ff\$4bccad40\$0200a2c6@dehllsystem>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

I'm doing a project involving solar panels and batteries, for emergency power for my ham station. Part of the project involves using a Heart 2000-watt inverter for converting DC to AC. The instructions for the inverter specify that heavy duty battery cable be used for hooking it up.

Now...battery cable at an auto parts store is pretty expensive. I notice that Home Depot carries what appears to be pretty heavy duty copper cable in their electrical department, and I would assume that heavy duty copper cable is heavy duty copper cable, no matter what the name.

However....the reason for this query...I have been known to get in trouble for my "assumptions" in the past :-). So would ask if anyone knows anything special about battery cable to distinguish it from the Home Depot stuff? Or is my assumption correct?

Thanks,

John AF4WM

Date: Thu, 3 May 2001 14:35:41 -0400
From: "Lofstead, Jerry" <Jerry.Lofstead@itb.mckhboc.com>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97571] RE: Battery cable - a query
Message-ID: <078F21595FA7D411B87B00805FA728E64A46FF@atlexc02ntms.hboc.com>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"

John,

You can burn your self real fast with this. Depending on the distance from

the batteries to the inverter, you are really looking at welding cable... 0/0 gauge or better if you are running over a couple of feet. Heart should have supplied a table for distance and cable size. Also you need to consider what the voltage at the battery terminals will be when you start the inverter. If it is only terminal voltage and not 13.8-14.4 VDC, you need to consider that too. When that inverter hits the battery as a load, the terminal voltage will be pulled down unless you have a lot of battery supplying power. For my 1 KW inverter in my motor home, I needed to run 0/0 for a 6 foot run... to minimize losses.

Jerry
W3CDE

-----Original Message-----

From: John Nall [mailto:nally@talstar.com]
Sent: Thursday, May 03, 2001 11:32 AM
To: Low Power Amateur Radio Discussion
Subject: Battery cable - a query

I'm doing a project involving solar panels and batteries, for emergency power for my ham station. Part of the project involves using a Heart 2000-watt inverter for converting DC to AC. The instructions for the inverter specify that heavy duty battery cable be used for hooking it up.

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However....the reason for this query...I have been known to get in trouble for my "assumptions" in the past :-). So would ask if anyone knows anything special about battery cable to distinguish it from the Home Depot stuff? Or is my assumption correct?

Thanks,

John AF4WM

Date: Thu, 3 May 2001 14:40:05 -0400
From: "Mike Yettsko" <myetsko@insydesw.com>
To: <nally@talstar.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97572] Re: Battery cable - a query
Message-ID: <014401c0d400\$be442780\$4206d10a@endpoints.com>
MIME-Version: 1.0
Content-Type: text/plain;

charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Well, it should be heavy. PRETTY DARN HEAVY!!!

Remember, the way some inverters work, they can actually draw peak, or close to peak, current at weird spots in the waveform.

Therefore, HEAVY HEAVY HEAVY...

If you want a good quality cable, consider a short piece of what is called 'service entry' cable. It should be double or triple 0 size. (At least 3/8" diameter.) A MUST if you're need to run more than a couple feet to your battery.

You CANNOT go TOO HEAVY!! (Unless weight and/or size is one of your compromises.)

By the way, HEAVY service entry wire is usually available for free at most construction sites. They always seem to have a few foot lengths of it. If you ask nicely. There's usually a lot of the old 3 conductor around from home remodeling too. A lot of times a service entry is redone, and they will use 3 discrete runs in a pipe (mine was when I had mine redone to support 'demand side servicing') and the old 3 conductor stuff was 'ripped out'.

Mike

> I'm doing a project involving solar panels and batteries, for emergency
> power for my ham station. Part of the project involves using a Heart
> 2000-watt inverter for converting DC to AC. The instructions for the
> inverter specify that heavy duty battery cable be used for hooking it up.
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> Now...battery cable at an auto parts store is pretty expensive. I notice
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> their electrical department, and I would assume that heavy duty copper
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> However....the reason for this query...I have been known to get in trouble
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anything
> special about battery cable to distinguish it from the Home Depot stuff?
Or
> is my assumption correct?
>
> Thanks,

>
> John AF4WM
>
>

Date: Thu, 03 May 2001 18:45:59
From: "Mike WA8BXN" <hubby2k@hotmail.com>
To: nally@talstar.com, qrp-1@Lehigh.EDU
Subject: [97573] Re: Battery cable - a query
Message-ID: <F1760LZCHusMjQHtMFa00000d48@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

Between the solar panel and batteries you can use moderate size wire since relatively low currents are involved. But between the inverter and the battery you need massive wire since for 2KW you are going to carry on the order of 200+ amps continuously. Look into heavy duty welding cable and keep it short!

Get your FREE download of MSN Explorer at <http://explorer.msn.com>

Date: Thu, 03 May 2001 18:45:06 +0000
From: Garie Halstead <k8kfj@ntelos.net>
To: doug@ycsi.net
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97574] Re: [OT] Mysteries of 30-meters
Message-ID: <3AF160E1.8DFF1827@ntelos.net>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

On Wednesday, 02 May 2001, K7YD wrote:

> In today's modern world of communications, it can be assumed
> that at some juncture, most all of HF communications is monitored
> by someone, somewhere with a bone to pick or just morbid
> curiosity.

-----BEGIN PGP SIGNED MESSAGE-----
Hash: SHA1

The same can be said in emailing. This is the very reason why I always encrypt my emails containing important or sensitive content.

72 //Gary *K8KFJ*
West Virginia

-----BEGIN PGP SIGNATURE-----

Version: PGPfreeware 6.5.1 for non-commercial use <<http://www.pgp.com>>

iQA/AwUB0vFgaKswLUcJpnTmEQJuBwCdE4vDdMaYLPuHhblRDAiRKZitr0Ao0+a
4kSvBVlIHmzx1pJUIep6LQ6G
=uX/2

-----END PGP SIGNATURE-----

Date: Thu, 3 May 2001 12:56:58 -0600
From: William R Colbert <w5xe@juno.com>
To: qrp-1@lehigh.edu
Subject: [97575] Re: OT: Rcvrs for Evesdropping (was 30M Mysteries)
Message-ID: <20010503.125659.-421109.1.w5xe@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

Another of the receiver systems that the Navy likes to use (we tested some at our facility in the late 90's) are Cubic - really nice, very expensive, can be accomodated with spectral displays as can the W-J's and Harris's, and they have the half rack version like the W-J, and like the Racal, the half height - 2 1/2 to 3".
A lot of the back end work may well have been installed by E-Systems over in Greenville - they are Masters of the trade!!

"The more I see of the representatives of the people, the more I admire my dogs." letter from Count d'Orsay
Ray Colbert, W5XE, 00TC#3618, SOWP#1064M NARTE-NCT2
FP# 111, SOC#78, QRP-ARCI 5784, El Paso, (FAR WEST) TEXAS

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<http://dl.www.juno.com/get/tagj>.

Date: Thu, 3 May 2001 22:56:25 +0400
From: "Oleg Borodin" <vector72@lipetsk.ru>
To: <w5xe@juno.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97576] Re: [OT] Mysteries of 30-Meters (LONG!)
Message-ID: <20010503190854Z10725-292+1933@relay.lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=Windows-1251
Content-Transfer-Encoding: 7bit

Dear William!

I wonder for your knowledge about KGB-code system!
I'm Russian man and has my military service during 7 years,
but I didn't know code-system ;-) But YOU?!?!
Really, I've shack!
P.S. This is joke. Wish you all the best, dear William!
Oleg V. Borodin E-Mail: vector72@lipetsk.ru
72 & 73! de RV3GM/QRP

>
> Lots of wrong answers and info re: this topic. A lot of
> the info is carried in the header of the message and the
> identifying info of the particular illicit/clandestine originator
> be it the CIS, FRB(old KGB) GRU or some of the other
> former block nations is also in the header and ending
> of the message. Normal group is 5 figures or as some
> of the so called experts on the spooks lists refer to the
> voice numbers broadcasts as 3x2 five figure because

Date: Thu, 3 May 2001 23:07:20 +0400
From: "Oleg Borodin" <vector72@lipetsk.ru>
To: <w5xe@juno.com>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97577] Re: [OT] Mysteries of 30-Meters (LONG!)
Message-ID: <20010503190854Z10768-291+1862@relay.lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=Windows-1251
Content-Transfer-Encoding: 7bit

Dear friends!

We have not a spies (spy) now because our spy want money more then
American Spy, Hi! Simply, to pay for American Spy then to Russian,Hi-Hi!!!
P.S. I think I may be in KGB soon with my jokes :-) !

Oleg V. Borodin E-Mail: vector72@lipetsk.ru
72 & 73! de RV3GM/QRP

Date: Thu, 3 May 2001 23:14:20 +0400
From: "Oleg Borodin" <vector72@lipetsk.ru>
To: "qrp-l" <qrp-l@lehigh.edu>
Subject: [97578] Pixie2 on 20m
Message-ID: <20010503191944Z10901-293+1857@relay.lipetsk.ru>
MIME-Version: 1.0
Content-Type: text/plain; charset=Windows-1251
Content-Transfer-Encoding: 7bit

Dear QRPers!
I'm very interesting for:
does anybody use the PIXIE2 on 20m? Why results?
Let me know, please. Good luck!
Oleg V. Borodin E-Mail: vector72@lipetsk.ru
72 & 73! de RV3GM/QRP

Date: Thu, 3 May 2001 12:30:48 -0700
From: Bob Nielsen <nielsen@oz.net>
To: qrp-l@lehigh.edu
Subject: [97579] Re: the 2\$ gallon!
Message-ID: <20010503123048.A1632@oz.net>
Mime-Version: 1.0
Content-Type: text/plain; charset=iso-8859-1
Content-Disposition: inline
Content-Transfer-Encoding: 8bit

On Thu, May 03, 2001 at 07:14:40PM +0100, Euramcom wrote:
> Well Gangue,
>
> Think yourselves lucky in the land of the free because we must be in
> the home of the brave here in the UK
>
> Current price of a gallon of (gas) petrol is around 3.85 (UKp) which
> is also about the same as the price of diesel oil. At the current
> rate of exchange that equates to about \$5.50 (USd)
>
> Oh, and ISTR you use bigger Gallons in the states than we do here in
> Imperial measure.

Actually it's the other way around - the U.S. gallon = 4/5 Imperial gallon.

--

Bob Nielsen, N7XY
Bainbridge Island, WA
IOTA NA-065, USI WA-028S

nielsen@oz.net
<http://www.oz.net/~nielsen>

Date: Thu, 3 May 2001 20:30:01 +0100
From: "Ted Williams" <ted@g0ull.fsnet.co.uk>
To: "QRP-L" <qrp-l@lehigh.edu>, <mel@euramcom.freeseerve.co.uk>
Subject: [97580] Re: the 2\$ gallon!
Message-ID: <01d901c0d407\$d8cf55a0\$afb8883e@tedspc>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

No, Mel.

The US gallon is only 0.83 times an Imperial gallon, so that a 10 gallon Texas hat is only 8.3 real gallons, which is really no big deal ;-)

Ted g0ull

Date: Thu, 3 May 2001 15:34:30 -0400
From: Richard Rood <fcsww@juno.com>
To: qrp-l@lehigh.edu
Subject: [97581] Re: [OT] Mysteries of 30-meters
Message-ID: <20010503.153654.-3830513.4.fcsww@juno.com>
MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

"I usually sit down to breakfast with my little Vectronics xmtr/rcvr pair on the table. Generally, the band is pretty quiet at that time; open, but quiet. I frequently hear a strong station that comes on about 1100 UTC that sends five-letter groups, encrypted, for at least fifteen or twenty minutes. I have to get on with the day before the transmission ends. Does any one have any clues about where this transmission originates, or any other information about it? Paul, WQ5X"

I have re-read the OT messages from the start. See the first message quoted above. Paul stated "five-letter groups."

I have often heard a "4X" station somewhere between 10.05 and 10 MHz, well outside the 30 M band. sending "five letter groups" in a military broadcast format: probably to the Israeli Navy.
Could the Vectronics receiver have been misadjusted a mite?

Dick, W2SCF

Date: Thu, 3 May 2001 14:41:34 -0500
From: Harris Keith E CONT CNIN <harris_k@crane.navy.mil>
To: "'qrp-l@lehigh.edu'" <qrp-l@lehigh.edu>
Subject: [97582] Re: the \$2 gallon
Message-ID:
<4F76B3D4A76AD111803B00A0C9893D9C06ED8D53@cninexchsrv05.crane.navy.mil>
MIME-Version: 1.0
Content-Type: text/plain

Gang,

When I was stationed in the UK in the mid 70's (right after the oil embargo) a bloke at the pub asked me why American cars got such lousy gas mileage. I figured up at the current exchange rate (\$2.42 = 1 pound sterling) the the pre-embargo price of gas in the us would work out to about 15p per imperial gallon. I asked him if he would worry about gas mileage if he had to pay only 15p a gallon. The going price at the time in Bedfordshire was about 90p a gallon. I think he understood then.

73 de N9KH

Date: Thu, 03 May 2001 15:52:51 -0400
From: Ken Newman <N2CQ@citnet.com>
To: epaqrp-l@lehigh.edu, QRP-L@lehigh.edu, njqrp@njqrp.org, n9avg@amsat.org
Subject: [97583] [CONTEST] QRP Contest Calendar - May 2001
Message-ID: <3.0.6.32.20010503155251.008bbc30@mail.citnet.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

~~~~~  
QRP CONTEST CALENDAR

May 2001

~~~~~  
AGCW DL QRP Party (CW) ... QRP Contest!

May 1 -1300z to 1900z

Rules: <http://home.online.no/~jana1me/htmlrules/agcwmay.html>

European only QSO party"

~~~~~  
MARAC County Hunters Contest (CW/SSB)

May 5 - 0000z to May 6 - 2400z

Rules: <http://www.sk3bg.se/contest/maracchc.htm>

"Mobile Stations everywhere"

~~~~~  
Ten-Ten International Spring QSO Party (CW) ... QRP Category

May 5 - 0001z to May 6 - 2400z

Rules: <http://listserv.lehigh.edu/lists/tenten-1/rules.html>

"Ten meter fans will be there"

~~~~~  
FPCI "NOONER" QSO Party ... QRP Contest!

May 5 - 1600z to 2000z

Rules: <http://www.fpqr.com/fpqrqsp.html>

"Work the Flying Pigs"

~~~~~  
Indiana QSO Party (All)

May 05 - 1400z to May 06 - 2300z

Rules: <http://www.arrl.org/contests/months/may.html>
"Work Indiana Counties"

~~~~~  
Massachusetts QSO Party (All)

May 5 - 1800z to May 6 - 0400z and  
May 6 - 1100z to May 6 - 2100z

Rules: <http://www.qsl.net/fara/qsoparty/maqsorules.html>

"Work MA Counties"

~~~~~  
Connecticut QSO Party (Phone/CW/RTTY) ... QRP Category

May 5 - 2000z to May 6 - 0400z
May 6 - 1200z to May 6 - 2000z

Rules: http://www.danbury.org/cara/CT_QSO_Party.html

"QRP Competition"

~~~~~  
ARI International DX Contest (Italian) (CW/SSB/RTTY)

May 5 - 2000z to May 6 - 2000z

Rules: [http://www.kkn.net/~i2uiy/ARI\\_ru1\\_dx.html](http://www.kkn.net/~i2uiy/ARI_ru1_dx.html)

"Everyone works everyone"

~~~~~  
Adventure Radio Spartan Sprint (CW) ... QRP Contest!

May 8 - 0100z to 0300z (Monday evening US/Canada)

Rules: http://www.natworld.com/ars/pages/spartan_sprints/ss_rules.html

"Testing of lightweight radio gear suitable for outdoor QRP expeditions"

Nevada QSO Party (All)

May 12 - 0000z to May 13 - 0600z

Rules: <http://home.sol.no/~janalme/rules/qsonv.txt>

"Work NV Counties"

Volta WW RTTY Contest

May 12 - 1200z to May 13 - 1200z

Rules: <http://home.sol.no/~janalme/rules/avolta.txt>

"Honoring Electical Discoverer ALESSANDRO VOLTA"

Oregon QSO Party (All)

May 12 - 1400z to May 13 - 0200z

Rules: <http://www.empnet.com/codxc/>

"Work OR Counties"

FISTS Spring Sprint (CW) ... QRP Category

May 12 - 1700z to 2100z

Rules: <http://www.fists.org/sprints.html>

"WHEN YOU'VE WORKED A FIST, YOU'VE WORKED A FRIEND"

CQM International DX Contest (CW/SSB/SSTV) ... QRP Category

May 12 - 2100z to May 13 - 2100z

Rules: http://www.mai.ru/~crc/cq-m/cqm_rul0.txt

"Peace to the world"

~~~~~  
Dayton Hamvention (QRP Event - FDIIM)

May 18-20

Info: <http://www.hamvention.org/>  
~~~~~

European Sprint (CW)

May 19 - 1500z to 1859z

Rules: <http://home.sol.no/~jana1me/htmlrules/eusprint.html>

"Work Europeans"
~~~~~

Baltic Contest (CW/SSB) (80 Meters)

May 19 - 2100z to May 20 - 0200z

Rules: <http://home.sol.no/~jana1me/rules/baltic.txt>

"Promote Radio Sport. Work anyone"  
~~~~~

Anatolian RTTY WW Contest (Turkey)

May 26 - 0000z to May 27 - 2400z

Rules: <http://www.sk3bg.se/contest/anrywwc.htm>

"RTTY All Bands"
~~~~~

CQWW WPX Contest (CW) ... QRP Category

May 26 - 0000z to May 27 - 2400z

Rules: <http://ourworld.compuserve.com/homepages/n8bjq/>

"Great DX"

~~~~~  
QRP ARCI Hoot Owl Sprint (CW) ... QRP Contest!

May 27 - 2000 to 2400 (Local Time)

Rules: <http://personal.palouse.net/rfoltz/arci/hoot.htm>

"QRP Fun"

~~~~~  
Michigan QRP Memorial Day Sprint (CW) ... QRP Contest!

May 28 - 2300z to May 29 - 0300z

Rules: <http://www.qsl.net/k8dd/miqrp/rules01.htm>

"Bonus Points on HB Equipment"

~~~~~  
Thanks to K3WWP, SM3CER, WA7BNM, ARRL and others
for assistance in compiling this calendar.

Please foreward the contest info you sponsor to N2CQ@ARRL.NET and
we will post it and give it more publicity.

Anyone may use this "QRP Contest Calendar" for your website, newsletter,
e-mail list or other media as you choose.

(Include a credit to the source of this material of course.)

72 de

Ken Newman - N2CQ

N2CQ@ARRL.NET

**** QRP Contest Calendar ****

<http://www.njqrp.org/data/contesting.html>

<http://www.n3epa.org/Pages/Contest/contest.htm>

<http://www.qsl.net/cqrp/contests.html>

Date: Thu, 3 May 2001 13:08:51 -0700 (PDT)

From: N1EU <n1eu@yahoo.com>

To: qrp-l@lehigh.edu

Subject: [97584] RE: Battery cable - a query

Message-ID: <20010503200851.19283.qmail@web206.mail.yahoo.com>

MIME-Version: 1.0
Content-Type: text/plain; charset=us-ascii

John,

Part of your question was whether there was something unique about the cable type used in battery cables. I'm no expert, but I would hazard a guess that automotive battery cables use special insulation that resists degradation by oil/gasoline/battery acid (??) and this might partly explain their higher cost.

GL/73,
Barry N1EU

Do You Yahoo!?
Yahoo! Auctions - buy the things you want at great prices
<http://auctions.yahoo.com/>

Date: Thu, 3 May 2001 12:12:21 -0600
From: "Bob Follett" <bfollett@msn.com>
To: "QRP-L Group" <qrp-l@lehigh.edu>
Subject: [97585] [OT] Mysteries of 30-meters - Receivers
Message-ID: <01d201c0d3fc\$9b5f3060\$a5440e3f@MSNbfollett>
MIME-Version: 1.0
Content-Type: text/plain;
 charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

5/4 Letter Group'ers:

Boy, am I disappointed! In listing all the great receivers used by the spies/military so far, none of you mentioned our very own amateur supplier, TenTec!

Their commercial division has been supplying receivers to our government for some time, and now that WJ was taken over and stopped making their only 'consumer' radio, the WJ1000, TenTec is the only American producer of this grade of radio available, new, to the public. (and no, Drake doesn't make the grade).

Want to look for yourself? Point your browser to TenTec's site, look under the Commerical section for the TT 340. Half rack mount, with many similar characteristics to the WJ, for ONLY \$4,000. (But you don't have to order extra IF filters :-)

73, Bob

Bob Follett AB7ST
3133 American Saddler Dr.
Park City, UT 84060

Date: Thu, 3 May 2001 16:30:44 -0400
From: Rick Robinson <rerobins@email.uncc.edu>
To: nally@talstar.com
Cc: qrp-1@lehigh.edu
Subject: [97586] Re: Battery cable - a query
Message-ID: <v03102808b7176eb6510f@[152.15.144.71]>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

Hi John,

I've got a small solar system and have been a subscriber to Home Power magazine for about 12 years.
Home Power is an excellent reference for all things relating to renewable energy sources.

<http://www.homepower.com>

Since you are designing a large system, you need to check the NEC code regarding DC systems. I'm not sure welding cable would meet NEC code for connection from a battery bank to an inverter capable of supplying 2000 watts.

You wouldn't want to operate in an unsafe mode. I'd check with the experienced installers at Home Power.

72,

Rick kf4ar

Date: Thu, 3 May 2001 16:30:21 -0400 (EDT)
From: Jim Cotton <jim.cotton@wmich.edu>
To: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [97587] RE: Battery cable - a query
Message-ID: <Pine.GS0.4.21.0105031617310.28307-1000000@puma.lab2.cc.wmich.edu>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

Part of the question is:

What is the local electrical code? Which year of the NEC are they based on? Do you want to be "safe", or "meets code"?

Welding cable is an excellent way to connect batteries and move high currents, it also is not listed as an approved cable in the NEC (although it has been proposed for the next revision).

Many local codes require that the cables be in conduit to within 6" of the connection to the batteries.

Some breakers and protection devices are approved for both AC and DC...

A good wire loss table for PV system design can be found at:

http://www.windsun.com/Hardware/Wire_Table.htm

Jim Cotton, N8QOH		jim.cotton@wmich.edu
Western Michigan University		Phone: (616) 387-6421
Network Systems Group		Fax: (616) 387-5473

Date: Thu, 3 May 2001 21:10:43 +0100
From: Euramcom <mel@euramcom.freemove.co.uk>
To: <n1eu@yahoo.com>
Cc: <qrp-1@lehigh.edu>
Subject: [97588] RE: Battery cable - a query
Message-ID: <E14vPVZ-0001n2-00.2001-05-03-21-15-29@cmailg7.svr.pol.co.uk>
Mime-Version: 1.0
Content-Type: text/plain; charset="iso-8859-1"
Content-Transfer-Encoding: quoted-printable

On Thu, 3 May 2001 13:08:51 -0700 (PDT), n1eu@yahoo.com wrote:

>John,

>

>Part of your question was whether there was something

>unique about the cable type used in battery cables.

>I'm no expert, but I would hazard a guess that

>automotive battery cables use special insulation that
>resists degradation by oil/gasoline/battery acid (??)
>and this might partly explain their higher cost.
>
>GL/73,
>Barry N1EU
>
>-----
>Do You Yahoo!?
>Yahoo! Auctions - buy the things you want at great prices
><http://auctions.yahoo.com/>

It's normal in the UK for this stuff to have a HI-TEMP factor in=
the
insulation. It's also almost always stranded to allow for=
vibration
and movement from battery to engine block.

The stranded stuff resists flexing much better with least risk of=
breakage.

--72 and 73 de Mel Evans, e-mail mel@euramcom.freeserve.co.uk

Mel Evans GM6JAG Edinburgh Scotland
Home of the last HW9

Visit <http://www.euramcom.freeserve.co.uk> for
US Euro Ham Radio Equivalent Parts and info,
Add-a-Link page let's you add your own pages instantly

Date: Thu, 3 May 2001 16:01:22 -0500
From: "Rick Austin" <rick@ltcable.com>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97589] Fw: Re: Cost/Benefit Analysis of Iambic Paddle
Message-ID: <004501c0d414\$3675d420\$330aa8c0@ISS>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Here some food for thought (and hopefully response) from Ron Pfeiffer. I am uploading it with his permission.

Rick Austin

----- Original Message -----

From: "Ronald A Pfeiffer" <Ronald_A_Pfeiffer@raytheon.com>

To: <rick@ltcable.com>

Sent: Thursday, May 03, 2001 1:36 PM

Subject: Re: Cost/Benefit Analysis of Iambic Paddle

>
> Let me preface my comment with the fact that I am 57 years
> old and have done all my CW with a straight key.
>
> I have tried an iambic paddle with disastrous results! The true
> and only advantage of an iambic paddle is the useage of the
> "squeeze" to gain sending efficiency. I could never adapt
> to this technique.
> When I get tired of the straight key I use a single-lever paddle
> with the electronic keyer and I am fairly comfortable.
> If you have "ever" used the old "bug" key you will even have
> more difficulty adjusting to the iambic method.
>
> Just my opinion, hope you master it..
>
> Ron - N1ZSW
>
> ps - look at Chuck Adams essays will help:
> <http://www.qsl.net/k7qo/sending.html>
> <http://www.qsl.net/k7qo/qrqpart1.html>
> <http://www.qsl.net/k7qo/qrqpart2.html>
>
>

Date: Thu, 3 May 2001 15:20:01 -0600 (MDT)

From: "Karl F. Larsen" <k5di@zianet.com>

To: Rick Austin <rick@ltcable.com>

Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>

Subject: [97590] Re: Fw: Re: Cost/Benefit Analysis of Iambic Paddle

Message-ID: <Pine.LNX.4.33.0105031516450.1438-100000@localhost.localdomain>

MIME-Version: 1.0

Content-Type: TEXT/PLAIN; charset=US-ASCII

I just ordered an iambic paddle from ElectronicsUSA.com and it costs \$16.95. The straight paddle is only \$12.95. I really don't see the big difference...

--

Yours Truly,

- Karl F. Larsen, k5di@arrl.net (505) 524-3303 -

Date: Thu, 3 May 2001 16:48:50 -0500
From: "Brian Murrey" <bmmurray@amexol.net>
To: <ted@g0u1l.fsnet.co.uk>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97591] Re: the 2\$ gallon!
Message-ID: <002a01c0d41a\$d86c7a80\$b6312bd1@iquest.net>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

It's a huge deal if you have a 9 gallon head trying to get into a Texas 10 gallon hat.

I know. I've BEEN THERE.

72

----- Original Message -----

From: "Ted Williams" <ted@g0u1l.fsnet.co.uk>
To: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Sent: Thursday, May 03, 2001 2:30 PM
Subject: Re: the 2\$ gallon!

> No, Mel.

>

> The US gallon is only 0.83 times an Imperial gallon, so that a 10 gallon
> Texas hat is only 8.3 real gallons, which is really no big deal ;-)

>

> Ted g0u1l

>

>

Date: Thu, 03 May 2001 17:49:18 -0400
From: "Phil (VA3UX)" <phil@vaxxine.com>
To: nielsen@oz.net
Cc: "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97592] Re: the 2\$ gallon!
Message-ID: <3.0.5.32.20010503174918.007ad660@vaxxine.com>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

At 12:30 PM 5/3/2001 -0700, Bob Nielsen wrote:

>> Oh, and ISTR you use bigger Gallons in the states than we do here in
>> Imperial measure.
>
>Actually it's the other way around - the U.S. gallon = 4/5 Imperial gallon.
>

Quite correct. 3.8 liters per U.S. gallon; 4.5 liters per Imperial gallon.

Gas prices here in Ontario have been running around 70 - 75 cents
(Canadian) per liter for the cheap stuff (\$1.73 US to \$1.85 US, per US
gallon).

Phil

>--
>Bob Nielsen, N7XY
>Bainbridge Island, WA
>IOTA NA-065, USI WA-028S
>
>
nielsen@oz.net
<http://www.oz.net/~nielsen>

Date: Thu, 3 May 2001 15:57:40 -0400
From: preacher102677@juno.com
To: qrp-1@Lehigh.EDU
Subject: [97593] Re: Battery cable - a query
Message-ID: <20010503.175701.-141275.1.preacher102677@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit

What about using multiple wires? You'd split the current that way,

right?

Seems like a good idee, but like you, I've often made the "donkey" out of "u" and "me."

On Thu, 3 May 2001 14:31:40 -0400 "John Nall" <nally@talstar.com> writes:

> I'm doing a project involving solar panels and batteries, for
> emergency
> power for my ham station. Part of the project involves using a
> Heart
> 2000-watt inverter for converting DC to AC. The instructions for
> the
> inverter specify that heavy duty battery cable be used for hooking
> it up.
>
> Now...battery cable at an auto parts store is pretty expensive. I
> notice
> that Home Depot carries what appears to be pretty heavy duty copper
> cable in
> their electrical department, and I would assume that heavy duty
> copper cable
> is heavy duty copper cable, no matter what the name.
>
> However....the reason for this query...I have been known to get in
> trouble
> for my "assumptions" in the past :-) So would ask if anyone knows
> anything
> special about battery cable to distinguish it from the Home Depot
> stuff? Or
> is my assumption correct?
>
> Thanks,
>
> John AF4WM
>

LIC,

G. Brandon Hoyt --"Known far and Wide as the Great Pumpkin."

Photographer, Philosopher, Preacher, Pirate, Poet.

DE KG4GVL Clear.

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Date: Thu, 3 May 2001 15:13:02 -0700
From: <schoon@amgt.com>
To: <qrp-1@Lehigh.EDU>, <phil@vaxxine.com>
Subject: [97594] RE: the 2\$ gallon!
Message-ID: <c=US%a=_%p=American_Geotech%l=AG-CALCITE-BDC-010503221302Z-787@ag-basalt-pxy.amgt.com>
MIME-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
Content-Transfer-Encoding: 7bit

That's cheap! But the 1500 mile drive to get up there would defeat the purpose! Even on San Juan Island, it's much cheaper there than Southern California. Prices range from \$2.03 and up!

.mark

>-----
>From: Phil (VA3UX)[SMTP:phil@vaxxine.com]
>Sent: Thursday, May 03, 2001 2:49 PM
>To: Low Power Amateur Radio Discussion
>Subject: Re: the 2\$ gallon!
>
>At 12:30 PM 5/3/2001 -0700, Bob Nielsen wrote:
>>> Oh, and ISTR you use bigger Gallons in the states than we do here in
>>> Imperial measure.
>>
>>Actually it's the other way around - the U.S. gallon = 4/5 Imperial gallon.
>>
>
>Quite correct. 3.8 liters per U.S. gallon; 4.5 liters per Imperial gallon.
>
>Gas prices here in Ontario have been running around 70 - 75 cents
>(Canadian) per liter for the cheap stuff (\$1.73 US to \$1.85 US, per US
>gallon).
>
>Phil
>
>>--
>>Bob Nielsen, N7XY nielsen@oz.net
>>Bainbridge Island, WA http://www.oz.net/~nielsen
>>IOTA NA-065, USI WA-028S
>>
>>
>
>
>

Date: Thu, 03 May 2001 16:16:31 -0600 (CST)
From: "Brian.Buydens@usask.ca" <buydens@duke.usask.ca>
To: "Phil (VA3UX)" <phil@vaxxine.com>
Cc: Low Power Amateur Radio Discussion <qrp-1@Lehigh.EDU>
Subject: [97595] OT - Re: the 2\$ gallon!
Message-ID: <Pine.OSF.4.31.0105031606530.14945-1000000@duke.usask.ca>
MIME-version: 1.0
Content-type: TEXT/PLAIN; charset=US-ASCII

On Thu, 3 May 2001, Phil (VA3UX) wrote:

> >Actually it's the other way around - the U.S. gallon = 4/5 Imperial gallon.
> >
>
> Quite correct. 3.8 liters per U.S. gallon; 4.5 liters per Imperial gallon.
>

This reminds me of a story my dad told me. When he was grade 3 (65 years ago or so) his teacher asked why the cost of gas might be different between Canada and the U.S. My dad replied that the Americans used a different size gallon. The teacher boxed his ears and told him not to be a smart aleck! The next day she asked the same question, my dad gave the same answer and got his ears boxed again! Finally on the third day, the teacher told my dad she looked up the size of the American gallon, and he was right after all.

Brian Buydens
Veterinary Electronic Data Specialist
Computing Services, University of Saskatchewan
email: Brian.Buydens@usask.ca
<http://duke.usask.ca/~buydens>
VE5RDV

Did you hear about the two antennas that got married? The wedding was a disaster but the reception was great!

Date: Thu, 03 May 2001 16:19:29 -0600
From: "Carlos Caro" <cjcaro35@hotmail.com>
To: buydens@duke.usask.ca, qrp-1@Lehigh.EDU
Subject: [97596] Re: OT - Re: the 2\$ gallon!
Message-ID: <F111V1EetVoMDrxxnSY00000155@hotmail.com>
Mime-Version: 1.0
Content-Type: text/plain; format=flowed

A rare teacher that admitted he/she was wrong. Did your dad get to box her ears ???

Carlos KBOREI

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Date: Thu, 3 May 2001 18:43:19 -0400
From: "Don Wilhelm" <w3fpr@arrl.net>
To: <mel@euramcom.freemove.co.uk>, "Low Power Amateur Radio Discussion" <qrp-1@Lehigh.EDU>
Subject: [97597] Re: Battery cable - a query
Message-ID: <003901c0d423\$095b5be0\$ae2b3604@dbw11main>
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

Gang,

Just a bit of additional information:

While stranded wire resists flexing much better than solid wire when clamped connections are used, if the connections are soldered, stranded wire will break with flexing near the ends - right where the solder ends and the real stranded wire starts. So if the wire is subject to flexing (as in a cable with a connector on the end) be sure to support the stranded wire securely beyond the soldered connection.

As Sportin' Life said: "It ain't necessarily so"

73,

Don Wilhelm -Chapel Hill, NC W3FPR home page: <http://www.qsl.net/w3fpr/>
QRP-L # 485 K2 SN 0020 [mailto: w3fpr@arrl.net](mailto:w3fpr@arrl.net)

----- Original Message -----

From: "Euramcom" <mel@euramcom.freemove.co.uk>

>

> The stranded stuff resists flexing much better with least risk of
> breakage.
>

End of QRP-L Digest 2178
